

Amendments to the Specification:

Please amend the title of the present application as follows:

-- METHOD AND SYSTEM FOR POWER CONTROL IN RADIO ~~TRANSCIEVERS~~
TRANSMITTER --

Please replace paragraph [0001] with the following amended paragraph:

[0001] The present invention relates, generally, to power control in radio transmitters and, more particularly, to ~~transeeivers~~ transmitters used in telecommunications systems, such as used in mobile terminals.

Please replace paragraph [0003] with the following amended paragraph:

[0003] In the GSM, the Gaussian Minimum Shift Keying (GMSK) modulation is used. On the contrary, in the EDGE, the 8PSK modulation scheme will be used. A remarkable difference between these two modulation schemes is that the 8PSK modulation is a nonconstant envelope modulation scheme, whereas the GMSK is a constant envelope modulation scheme. As such, that in the 8PSK modulation, some part of the information is contained in the amplitude of the envelope of the transmitted signal and some part is contained in the phase of the transmitted signal. The amplitude modulation makes it more difficult to control the power of the ~~transeeiver~~ transmitter. The main reason for the difficulty is that the varying amplitude causes variations in the peak signal power. The amplitude depends on the signals that are sent, and the peak power varies between time slots or data bursts that are sent with the same average output power.

Please replace paragraphs [0007-10] with the following amended paragraphs:

[0007] It is an object of the present invention, therefore, to provide a solution by which it is possible to bring about a system with which the output power of a radio ~~transceiver~~transmitter can be controlled in a simple and reliable manner and the component count reduced by use of software control.

[0008] This is accomplished in accordance with the principles of the present invention by providing a method or a system for controlling the power of the radio ~~transceiver~~transmitter as described herein.

[0009] A power control system for a radio ~~transceiver~~transmitter includes i) an amplifier for amplifying a signal to an amplified signal, the signal including data bursts, ii) parts for obtaining a voltage corresponding to the power of the amplified signal, iii) a comparator for comparing the voltage with a reference voltage, adapted to produce a comparison result, and iv) a controller responsive to the comparator adapted to adjust a control signal of the amplifier if the comparing result shows that the voltage representing the power of the amplified signal deviates more than a predefined threshold value from the reference voltage. Further, the system includes time masking capabilities adapted to measure the voltage, in at least one time window with a predefined length, of a first data burst to be used in the comparator. In the system, the controller is adapted to set the control signal of the amplifier after a predetermined time delay, after the time window has lapsed. The proposed system solves problems with power detection in EDGE and other non-constant envelope system.

[0010] A method for power control in a radio ~~transceiver~~transmitter includes the steps of i) amplifying a signal to an amplified signal, the amplified signal including data bursts, ii) measuring a voltage, the voltage corresponding to the output power of the output signal, iii) comparing the voltage with a reference voltage, the comparison producing a comparison result, iv) in response to the comparing step, adjusting a control signal which is used in adjusting the amplifying step, if the result of the comparison step is that the voltage corresponding to the output power of the signal produced in the amplifying step deviates more than a predefined threshold value from the reference voltage, and v) selecting at least one time window with a predefined length for a data burst for measuring the voltage. The adjusting step is adapted to adjust the control signal after a predetermined time delay. The proposed method solves problems with power detection in EDGE and other non-constant envelope system.

Please replace paragraph [0019] with the following amended paragraph:

[0019] FIG. 4 shows a schematic presentation of a burst template of the EDGE 8PSK modulation. For the time axis, the figures under the axis correspond to the duration of each state of the burst in microseconds. When the burst is switched on at zero time, the ~~transceiver~~transmitter power ramps up. The first and last 28 .mu.s is for ramping up and down respectively. The actual sending of the payload data of the burst begins 28 .mu.s after the beginning (T=0) of the burst, and has a duration of 542.8 .mu.s. As specified in the specification 3GPP TS 45.005 V5.2.0 (Third Generation Partnership Project; Technical Specification Group; GSM/Edge Radio Access Network: Radio Transmission and Reception), a specific time interval lasting a total of 4 .mu.s is defined for the envelope.

Please replace paragraph [0049] with the following amended paragraph:

[0049] The present invention can be utilized not only in mobile terminals, but also in any devices that include a ~~transceiver~~transmitter transmitting a signal containing data bursts. Such a device may be a base station used in mobile networks, for example.